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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/765,087  | 01/28/2004  | Young Choi           | 45657               | 9814             |
| 1609  | 7590        | 11/29/2005           | EXAMINER            |                  |
| ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.<br>1300 19TH STREET, N.W.<br>SUITE 600<br>WASHINGTON,, DC 20036 |             |                      | CAI, WAYNE HUU      |                  |
|   |             | ART UNIT             | PAPER NUMBER        |                  |
|   |             |                      | 2681                |                  |

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 10/765,087             | CHOI ET AL.         |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Wayne Cai              | 2681                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 28 January 2004.  
2a)  This action is FINAL.                            2b)  This action is non-final.  
3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-12 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-2, 4-8, and 10-12 is/are rejected.

7)  Claim(s) 3 and 9 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 28 January 2004 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a))

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date .  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 5-6, and 11-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Aagaard et al. (hereinafter “Aagaard”) (US – 6,839,576 B2).

**Regarding claim 1**, Aagaard discloses a method for detecting a folder position in a rotation touch phone having a camera, the rotation touch phone including a sensor section, a folder, a body, and a connecting section, the folder having a magnet, the sensor section including first, second and third sensors for detecting the magnet, the first and second sensors being located on the body and the third sensor being located on the connecting section, the connecting section connecting the folder to the body, the folder being movable from first, second, third and fourth states, the first state signifying a state in which the folder is initially closed, the second state signifying a state in which the folder has been opened from the first state (fig. 4), the third state signifying a state in which the folder has been rotated substantially 180 degrees from the second state (fig. 5), the fourth state signifying a state in which the folder has been closed from the third state (figs. 6 & 7), the method comprising the steps of:

- i) receiving a signal from the sensor section notifying that the sensor section detects the magnet (i.e., magnet 1373) (col. 5, lines 52-63; col. 6, lines 37-48);
- ii) deciding that the folder is in at least one of the first to fourth states, based on the signal input from the sensor section (col. 6, lines 6-48).

**Regarding claims 5, and 11,** Aagaard discloses a method, and a controller for utilizing first and second display sections as an illumination source when photographing an object by detecting a position of a folder in a rotation touch phone having a rotatable camera, the rotation touch phone including a sensor section, a folder, a body, and a connecting section, the folder having a magnet and the first and second display sections, the sensor section including first, second, and third sensors for detecting the magnet, the first and second sensors being located on the body and the third sensor being located on the connecting section, the connecting section connecting the folder to the body and having the camera, the folder being movable from first, second, third and fourth states, the first state signifying a state in which the folder is initially closed, the second state signifying a state in which the folder has been opened from the first state, the third state signifying a state in which the folder has been rotated substantially 180 degrees from the second state, the fourth state signifying a state in which the folder has been closed from the third state, the method comprising the steps of:

- i) deciding that the folder is in at least one of the first to fourth states, when the sensor section inputs a signal notifying that the sensor section detects the magnet (col. 6, lines 6-48);

ii) utilizing at least one of the first and second display sections as the illumination source when the folder is in at least one of the second and third states (col. 4, lines 30-65).

**Regarding claims 6, and 12,** Aagaard discloses the method, and the controller as claimed in claims 5, and 11. It is also inherent that, wherein step ii) includes the steps of: a) utilizing the second display section as the illumination source when the folder is in the second state; b) utilizing the first display section as the illumination source when the folder is in the third state.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aagaard et al. (hereinafter "Aagaard") (US – 6,839,576 B2) in view of Nagamine (US 2003/0203747 A1).

**Regarding claim 2,** Aagaard discloses the method as claimed in claim 1 as described above, except for wherein step i) includes the steps of:

- a) transferring a signal notifying that the first sensor detects the magnet;
- b) transferring a signal notifying that the second sensor detects the magnet;
- c) transferring a signal notifying that the third sensor detects the magnet.

In a similar endeavor, Nagamine discloses a foldable portable telephone having a display portion selectively put into a lengthwise state or an oblong state and a pair of front camera portions. Nagamine also discloses:

wherein step i) includes the steps of:

- a) transferring a signal notifying that the first sensor detects the magnet (paragraph 0066);
- b) transferring a signal notifying that the second sensor detects the magnet (paragraph 0067);
- c) transferring a signal notifying that the third sensor detects the magnet (paragraph 0068).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include three different sensors in order to determine the position of the rotation touch phone by detecting the corresponding magnet.

**Regarding claim 7**, Aagaard discloses a rotation touch phone comprising:

- a camera adapted to take pictures for the rotation touch phone (col. 3, lines 51-57);
- a folder adapted to move from first, second, third and fourth states, the first state signifying a state in which the folder section is initially closed (col. 3, lines 15-20), the second state signifying a state in which the folder section has been opened from the first state (fig. 4), the third state signifying a state in which the folder section has been rotated substantially 180 degrees from the second state (fig. 5), the fourth state

signifying a state in which the folder section has been closed from the third state (figs. 6 & 7), the magnet being disposed on the connector 903 which is part of folder section;

- a controller (fig. 10, element 1035; and its descriptions) adapted to receive a signal from the sensor section indicating that the sensor section detects the magnet (col. 6, lines 37-48); and decide that the folder section is in at least one of the first to fourth states, based on the signal input from the sensor section (col. 5, line 52 – col. 6, line 48).

Aagaard, however, fails to disclose:

- first and second display sections adapted to input and output information for the rotation touch phone;
- a sensor section adapted to detect a position of a magnet, the sensor section including first, second and third sensors.

In a similar endeavor, Nagamine teaches a foldable portable telephone having a display portion selectively put into a lengthwise state or an oblong state and a pair of front camera portions. Nagamine also discloses:

- first and second display sections adapted to input and output information for the rotation touch phone (i.e., fig. 5, elements main screen 11 & sub-display 19);
- a sensor section adapted to detect a position of a magnet, the sensor section including first, second and third sensors (paragraph 0060).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify and incorporate Aagaard with Nagamine to arrive at the present invention because it is more convenient for user to view the information from outside even when the phone is folded/closed and the sensors are used to detect the position of the display.

**Regarding claim 8**, Aagaard and Nagamine both disclose the apparatus of claim 7 as described above. Nagamine also discloses wherein the controller is further adapted to transfer a signal indicating that the first sensor detects the magnet (paragraph 0066); transfer a signal indicating that the second sensor detects the magnet (paragraph 0067); and transfer a signal indicating that the third sensor detects the magnet (paragraph 0068).

5. Claims 4, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Opela et al. (hereinafter “Opela”) (US 2004/0204122 A1) in view of Aagaard et al. (hereinafter “Aagaard”) (US – 6,839,576 B2).

**Regarding claims 4, and 10**, Opela discloses a method, and a controller for converting a mode of a rotation touch phone having a camera into a speakerphone mode by detecting a folder position, the rotation touch phone including a sensor section, a folder, a body, and a connecting section, the folder having a magnet and a bi-directional speakerphone, the sensor section including first, second and third sensors for detecting the magnet, the first and second sensors being located on the body and the third sensor being located on the connecting section, the connecting section having

the camera and connecting the folder to the body, the folder being movable from first, second, third and fourth states, the first state signifying a state in which the folder is initially closed, the second state signifying a state in which the folder has been opened from the first state, the third state signifying a state in which the folder has been rotated substantially 180 degrees from the second state, the fourth state signifying a state in which the folder has been closed from the third state, the method comprising the steps of:

i) converting the mode of the rotation touch phone into the speakerphone mode when the first sensor detects the magnet, which represents that the folder is in the first state in which the folder is closed (paragraph 0026);

Even though Opela does not discloses ii) converting the mode of the rotation touch phone into the speakerphone mode when the second sensor detects the magnet, which represents that the folder is in the fourth state in which the folder is closed by being rotated from the third state. Aagaard on the other hand discloses a multiple axis hinge assembly. Aagaard also discloses wherein the folder is in the fourth state in which the folder is closed by being rotated from the third state (fig. 7 and its description).

Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Opela with Aagaard to arrive at the invention so that user would be able to utilize the second display in addition with the speaker phone function.

***Allowable Subject Matter***

6. Claims 3, 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Cai whose telephone number is (571) 272-7798. The examiner can normally be reached on Monday-Friday; 9:00-6:00; alternating Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Wayne Cai  
Examiner  
Art Unit 2681



ERIKA A. GARY  
PRIMARY EXAMINER